# Amendments to the Drawings

The attached sheets of drawings are formal replacements for all of the drawings previously submitted.

Attachment: Replacement Sheets 1/13 through 13/13

#### **REMARKS**

The Examiner required corrected drawings in compliance with 37 C.F.R. § 1.121(d); objected to the specification because of informalities; rejected claims 1, 3, 7, 8, 10, and 14 under 35 U.S.C. § 102(b) as being anticipated by McKissock (U.S. Patent No. 4,825,449); rejected claims 2 and 9 under 35 U.S.C. § 103(a) as being unpatentable over McKissock in view of Cordell (U.S. Patent No. 4,756,011); objected to claims 4-6 and 11-13 as being dependent upon a rejected base claim, but indicated that they would be allowable if rewritten into independent form including all of the limitations of the base claim and any intervening claims; objected to claims 1-7 and 10-13 because of informalities.

# Requirement for Corrected Drawings

The Examiner required corrected drawings in compliance with 37 C.F.R. § 1.121(d). Specifically, the Examiner required that Figures 1-6, 11, 16, and 17 be labeled with a legend such as "Prior Art." Accordingly, Applicant submits new corrected drawings, with Figures 1-6, 11, 16, and 17 labeled as "Prior Art," in compliance with 37 C.F.R. § 1.121(d), and thus requests that the objection to the drawings be withdrawn. No new matter has been added through these amendments.

### Objection to the Specification

The Examiner objected to the specification because of informalities. Specifically, the Examiner writes that on page 7, line 7 the phrase "impulse response with not inter-symbol interference" should be corrected to say "impulse response without inter-symbol interference." Accordingly, Applicant amends the specification by replacing "with not" with "without," and thus requests that the objection to the specification be withdrawn. No new matter has been added through this amendment.

## Objection to Claims 1-7 and 10-13

The Examiner objected to claims 1-7 and 10-13 because of informalities.

With regard to independent claim 1, the Examiner writes that the language "modulated signal being demodulated into quadrature component signals and a symbol clock" is unclear

because "a modulated signal is not demodulated into a symbol clock, but rather the symbol clock is derived from the demodulated quadrature component signals." Accordingly, Applicant amends claim 1 by rephrasing the cited language and moving it from the preamble into the body of the claim: "means for deriving quadrature component signals and a symbol clock from the modulated signal." Applicant therefore requests that the objection to claim 1, and to claims 2-6 which depend from claim 1, be withdrawn.

With regard to claim 10, the Examiner writes that "lines 2-3 of claim 10 refer to pseudorandom symbols, whereas they should refer to pseudo-symbols." Accordingly, Applicant amends claim 10 by replacing "pseudo-random symbols" with "pseudo-symbols," and thus requests that the objection to claim 10, and to claims 11-13 which depend from claim 10, be withdrawn.

No new matter has been added through these amendments.

### Rejection of Claims 1, 3, 7, 8, 10, and 14 under 35 U.S.C. § 102(b)

The Examiner rejected claims 1, 3, 7, 8, 10, and 14 under 35 U.S.C. § 102(b) as being anticipated by McKissock. Applicant respectfully traverses.

With regard to independent claim 1, McKissock does not describe "pseudo-symbols" as recited in claim 1. "Office personnel must rely on the applicant's disclosure to properly determine the meaning of the claims. *Markman v. Westview Instruments*, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir.) (en banc), aff 'd, U.S., 116 S. Ct. 1384 (1996). MPEP § 2106(II)(C). "Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim." *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999). MPEP § 2106(II)(C). "Pseudo-symbols" are expressly defined in Applicant's specification at page 7, line 22 – page 8, line 16 (emphasis added):

"A modulated signal is sampled to produce symbols according to a sample clock during demodulation. However . . . the samples *do not agree with the true quadrature (I and Q) component values of the symbol*, but are pairs of symmetric samples about the true values. . . . These samples do not indicate an I or Q component value of the symbol, but the sampling process is similar. *Therefore these samples are called "pseudo-symbols."* 

McKissock does not describe "pseudo-symbols" in accordance with this express definition. Quite the opposite: McKissock teaches sampling the received signal "at instants

corresponding to the instants at which the decision circuitry of a digital radio receiver carries out its sampling operation" (column 3, lines 65-67), i.e., the *true quadrature component values of the symbol*. Accordingly, because McKissock does not describe "pseudo-symbols" as recited in claim 1, McKissock does not anticipate claim 1, and thus Applicant requests that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Claims 3 and 7 are in condition for allowance because they depend either directly or ultimately from independent claim 1, which is in condition for allowance as discussed above. Accordingly, Applicant requests that the rejection of claims 3 and 7 under 35 U.S.C. § 102(b) be withdrawn.

McKissock does not anticipate independent claim 8 for the reason discussed above in regard to claim 1. Accordingly, Applicant requests that the rejection of claim 8 under 35 U.S.C. § 102(b) be withdrawn.

Claims 10 and 14 are in condition for allowance because they depend either directly or ultimately from independent claim 8, which is in condition for allowance as discussed above. Accordingly, Applicant requests that the rejection of claims 10 and 14 under 35 U.S.C. § 102(b) be withdrawn.

#### Rejection of Claims 2 and 9 under 35 U.S.C. § 103(a)

The Examiner rejected claims 2 and 9 under 35 U.S.C. § 103(a) as being unpatentable over McKissock in view of Cordell. Applicant respectfully traverses.

Neither McKissock nor Cordell nor their combination teaches or suggests "means for displaying the pseudo-symbols" or "displaying the pseudo-symbols" as recited by claims 2 and 9 respectively. As discussed above in regard to the rejection of claim 1 under 35 U.S.C. § 102(b), McKissock teaches sampling and displaying on a graticule symbols representative of "instants at which the decision circuitry of a digital radio receiver carries out its sampling operation" (column 3, lines 65-67), i.e., the *true quadrature component values of the symbol*. Adding Cordell's timing alignment device to McKissock would only improve the timing accuracy of McKissock's sampling process. (Cordell, column 1, lines 58-66) Neither McKissock nor Cordell nor their combination teaches or suggests displaying symbols representing Cordell's samples. Therefore, claims 2 and 9 are not rendered obvious by a combination of McKissock and Cordell.

Accordingly, Applicant requests that the rejection of claims 2 and 9 under 35 U.S.C. § 103(a) be withdrawn.

### Objection to Claims 4-6 and 11-13

The Examiner objected to claims 4-6 and 11-13 as being dependent upon a rejected base claim, but indicated that they would be allowable if rewritten into independent form including all of the limitations of the base claim and any intervening claims. Applicant submits that claims 4-6 and 11-13 are in condition for allowance in their present form because they depend from independent claims 1 and 8 respectively, both of which are in condition for allowance for the reasons discussed above. Accordingly, Applicant requests that the objection to claims 4-6 and 11-13 be withdrawn.

#### Conclusion

In view of the foregoing remarks, allowance of claims 1-14 is urged, and such action and the issuance of this case are requested.

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